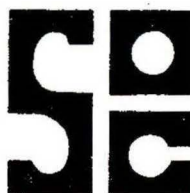


**PRELIMINARY VERTEBRATE FAUNAL SURVEY OF THE
ASHLAND RESEARCH NATURAL AREA**

SOUTHERN OREGON COLLEGE



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Phone (503) 482-6341

December 31, 1973

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C87

Dr. C. T. Dyrness
Pacific Northwest Forest and
Range Experiment Station
P. O. Box 3141
Portland, Oregon 97208

Dear Ted:

Enclosed is the long overdue report on the vertebrates of the Ashland Research Natural Area. I'm very sorry for the delay, but many other matters have pre-empted final preparation of the paper. I hope that this does not inconvenience your office to any great extent.

As I explained earlier, all the objectives were not accomplished or in some instances given enough attention during the study period. This was primarily due to unforeseen personal obligations during the time when I planned to work on certain specific aspects of the study. However, much time was spent during other periods of the study, which resulted in some valuable information being obtained. Hopefully, I will have an opportunity to fill in the gaps at a later time.

I will be doing some traveling during January and February and will get the Black salamander identification verified at that time. I also plan to be in Corvallis and hope to talk with you while there.

Sincerely,

Stephen Cross

Stephen P. Cross
Associate Professor of Biology

SPC:jd
Enclosure

Preliminary Vertebrate Faunal Survey of
the Ashland Research Natural Area

A report submitted to the USDA-Forest
Service Forestry Sciences Laboratory, Corvallis
in accordance with purchase order No. 852-COR-73

by

Stephen P. Cross
Associate Professor of Biology
Southern Oregon College

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INTRODUCTION

This study was undertaken to determine the qualitative nature of the vertebrate fauna of the Ashland Research Area. Attempts were made to verify the existence in the area of common vertebrate species, and special efforts were made to determine the residence of some rare and endangered forms such as the Ashland shrew (Sorex trigonirostris), Brazilian free-tailed bat (Tadarida brasiliensis), Ringtail (Bassariscus astutus), Siskiyou mountain salamander (Plethodon stormi), and Black salamander (Ancides flavipunctatus). Special efforts were also made to determine the presence the Bottae pocket gopher (Thomomys bottae), Heerman kangaroo rat (Dipodomys heermanni), and California meadow vole (Microtus californicus).

While not all the objectives of the study were accomplished some interesting discoveries were made, and the resulting lists of species should serve as valuable aid to researchers in the future.

The Ashland Research Natural Area is approximately three-fourths surrounded by road. Most of the data collecting was concentrated near road accessible areas. A disproportional large amount of time was spent at the extreme upper and lower elevations of the natural area near the east fork of Ashland Creek. At the lower elevations this work was concentrated in the riparian woodland just above Reeder Reservoir and in the small stand of Cercocarpus betuloides and Bromus sp. located on very shallow soil just north of the inlet. At the upper elevations this work was concentrated in the Douglas Fir stand and stream associated vegetation occurring in the southeast quarter of section 4. A disproportional small amount of time was spent in the middle two-thirds

of the natural area along Ashland Creek as it was quite inaccessible. All locations cited in this report are in reference to the map in the published report on the Ashland Research Natural Area. (Franklin, et al., 1972). Field studies in the area, associated with this specific study, took place between May 6 and November 9, 1973.

I would like to thank the several students who participated in various aspects of this project, especially Michael Manlove, Steven Judd and Connie Betts.

METHODS AND MATERIALS

Mammals were surveyed by standard trapping procedures. Lines of Sherman live traps (large and small) and museum special snap traps were set in several habitats at various times during the study. Standard gopher traps were used to capture gophers. Large national wire live traps were set for large rodents on a few occasions. Can traps were used in a special attempt to sample insectivores. Excluding the can traps, 1223 trap nights were spent sampling small mammals. I anticipated trying to sample the bat fauna to a much greater degree than eventually proved feasible. One evening of shooting and one evening of mist netting near the inlet of Ashland Creek to Reeder Reservoir were the only major efforts achieved. Exploration of the mine tunnels along the eastern boundary road in section 27 did not yield any specimens during the study but some previous recorded collections have been made at that site.

No attempt to collect birds was made. Binoculars were carried on all trips to the study area and positive sight identifications recorded. No special attempts were made to locate owls, especially the spotted owl, Strix occidentalis caurina, through the use of recorded

calls. I had initially planned to do this in conjunction with the nocturnal bat studies.

Ectothermic vertebrate species were sampled by standard procedures such as turning over or dismantling anything which could be used for shelter, such as bark, logs, rocks, moss, etc. On June 1, 1973, thirteen college students assisted me by spending approximately four hours searching for specimens while hiking down the east fork of Ashland Creek beginning about the middle of section 34 and continuing to Reeder Reservoir. On August 10, 1973, I sampled the fish population of the east fork of Ashland Creek, using standard angling procedures.

RESULTS

The results of the study are compiled in three tables. Table I is a revision and verification of the published list of mammals (Franklin, et al., 1972) occurring in the study area. Table II is a tentative list of birds and Table III is a list of ectothermic vertebrates which are thought to occur in the Ashland Research Natural Area. In all three lists notation is made for those species whose presence has been verified. Also included is notation identifying those species whose presence is considered by this author as marginal or uncommon in the primary habitat of the natural area.

TABLE I.--Tentative list of mammals which utilize the Ashland Research Area.

Order-Scientific Name	Common Name
Insectivora	
<u>Neurotrichus gibbsi</u> 1	Shrew mole
<u>Scapanus latimanus</u>	Broad-footed mole
<u>Sorex trowbridgii</u> 1	Trowbridge shrew
<u>Sorex vagrans</u> 1	Wandering shrew
<u>Sorex obscurus</u> 1,3	Dusky shrew
Chiroptera	
<u>Antrozous pallidus</u> *	Pallid bat
<u>Eptesicus fuscus</u>	Big brown bat
<u>Lasionycteris noctivagans</u>	Silver-haired bat
<u>Lasiurus borealis</u> *	Red bat
<u>Lasiurus cinereus</u>	Hoary bat
<u>Myotis californicus</u> 1	California myotis
<u>Myotis evotis</u>	Long-eared myotis
<u>Myotis thysonodes</u> 1	Fringed myotis
<u>Myotis volans</u>	Long-legged myotis
<u>Myotis yumanensis</u>	Yuma myotis
<u>Plecotus townsendi</u>	Western big-eared bat
<u>Tadarida brasiliensis</u> *	Mexican free-tailed bat
Lagomorpha	
<u>Lepus americanus</u> 1	Snowshoe hare
<u>Lepus californicus</u> *	Black-tailed jackrabbit
<u>Sylvilagus bachmani</u> *	Brush rabbit
Rodentia	
<u>Aplodontia rufa</u> 1	Mountain beaver
<u>Erethizon dorsatum</u>	Porcupine
<u>Eutamias amoenus</u>	Yellow-pine chipmunk
<u>Eutamias townsendi</u> 1	Townsend chipmunk
<u>Glaucomys sabrinus</u>	Northern flying squirrel
<u>Microtus californicus</u> *	California meadow vole
<u>Microtus longicaudus</u> 1,3	Long-tailed meadow vole
<u>Microtus oregoni</u> *3	Oregon meadow vole
<u>Microtus townsendi</u> *3	Townsend meadow vole
<u>Clethrionomys californicus</u> 1,3	California red-backed vole
<u>Neotoma fuscipes</u> 1	Dusky-footed woodrat
<u>Neotoma cinerea</u> 1,3	Bushy-tailed woodrat
<u>Peromyscus maniculatus</u> 1	Deer mouse
<u>Peromyscus truei</u> *3	Piñon mouse
<u>Sciurus griseus</u> 2	Western gray squirrel
<u>Spermophilus beechyi</u> 2	California ground squirrel
<u>Spermophilus lateralis</u> 1	Mantled ground squirrel

TABLE I.-continued

Order-Scientific Name	Common Name
Rodentia	
<u>Tamiasciurus douglasii</u>	Chickaree
<u>Thomomys bottae</u> *	Valley pocket gopher
<u>Thomomys mazama</u> 1,3	Mazama pocket gopher
<u>Zapus princeps</u> 1,3	Western jumping mouse
Carnivora	
<u>Bassariscus astutus</u> *	Ringtail cat
<u>Canis latrans</u> 2	Coyote
<u>Felis concolor</u> 2	Mountain lion
<u>Lynx rufus</u>	Bobcat
<u>Martes americana</u>	Marten
<u>Martes pennanti</u> *	Fisher
<u>Mephitis mephitis</u>	Striped skunk
<u>Spilogale putorius</u>	Spotted skunk
<u>Mustella erminea</u>	Short-tailed weasel or ermine
<u>Mustella frenata</u>	Long-tailed weasel
<u>Taxidea taxus</u> *	Badger
<u>Urocyon cinereoargenteus</u>	Gray fox
<u>Vulpes fulva</u>	Red fox
<u>Ursus americanus</u> 2	Black bear
Artiodactyla	
<u>Odocoileus hemionus</u> 2	Black-tailed mule deer

1 The animals presence verified by collection.

2 The animals presence verified by sighting, sound, or sign.

3 Represents an addition to original published list.

* The animals expected presence considered as marginal or uncommon in the primary habitat of the natural area.

TABLE II.-Tentative list of birds which utilize the Ashland Research Area.

Order-Scientific Name	Common Name
Anseriformes	
<u>Branta cabadebsus*</u>	Canada goose
<u>Anas platyrhynchos*</u>	Mallard
<u>Aix sponsa*</u>	Wood duck
Falconiformes	
<u>Cathartes aura</u>	Turkey vulture
<u>Accipiter gentilis</u>	Goshawk
<u>Accipiter striatus</u>	Sharp-shinned hawk
<u>Accipiter cooperii</u> 2	Cooper's hawk
<u>Buteo jamaicensis</u> 2	Red-tailed hawk
<u>Buteo swainsoni*</u>	Swainson's hawk
<u>Buteo lagopus</u>	Rough-legged hawk
<u>Aquila chrysaetos*</u>	Golden eagle
<u>Haliaeetus leucocephalus*</u>	Bald eagle
<u>Pandion haliaetus*</u>	Osprey
<u>Falco sparverius*</u>	Sparrow hawk
Galliformes	
<u>Dendragapus obscurus</u>	Blue grouse
<u>Bonasa umbellus</u> 2	Ruffed grouse
<u>Lophortyx californicus</u>	California quail
<u>Oreortyx pictus</u> 2	Mountain quail
Gruiformes	
<u>Fulica americana*</u>	American coot
Charadriiformes	
<u>Charadrius vociferus*</u>	Killdeer
<u>Capella gallinago*</u>	Common snipe
<u>Actitis macularia</u> 2	Spotted sandpiper
<u>Tringa solitaria*</u>	Solitary sandpiper
<u>Limnodromus scolopaceus*</u>	Long-billed dowitcher
Columbiformes	
<u>Columba fasciata</u>	Band-tailed pigeon
<u>Columba livia</u>	Rock dove
<u>Zenaidura macroura</u>	Mourning dove
Strigiformes	
<u>Tyto alba*</u>	Barn owl
<u>Otus asio</u>	Screech owl
<u>Bubo virginianus</u> 2	Great horned owl

TABLE II.-continued

Order-Scientific Name	Common Name
Strigiformes	
<u>Glaucidium gnoma</u>	Pygmy owl
<u>Strix occidentalis</u>	Spotted owl
<u>Strix nebulosa</u> *	Great grey owl
<u>Asio otus</u> *	Long-eared owl
<u>Aegolius acadicus</u>	Saw-whet owl
Caprimulgiformes	
<u>Phalaenoptilus nuttallii</u>	Poor-will
<u>Chordeiles minor</u> *	Common nighthawk
Micropodiformes	
<u>Selasphorus rufus</u>	Rufous hummingbird
<u>Selasphorus sasin</u> *	Allen's hummingbird
<u>Stellula calliope</u>	Calliope hummingbird
Coraciiformes	
<u>Megasceryle alcyon</u> 2	Belted kingfisher
Piciformes	
<u>Colaptes cafer</u>	Red-shafted flicker
<u>Dryocopus pileatus</u> 2	Pileated woodpecker
<u>Melanerpes formicivorus</u> *	Acorn woodpecker
<u>Asyndesmus lewis</u> *	Lewis' woodpecker
<u>Sphyrapicus varius</u> *	Yellow-bellied sapsucker
<u>Sphyrapicus thyroideus</u> *	Williamson's sapsucker
<u>Dendrocopos villosus</u>	Hairy woodpecker
<u>Dendrocopos pubescens</u>	Downy woodpecker
<u>Dendrocopos albolarvatus</u>	White-headed woodpecker
<u>Picoides tridactylus</u>	Northern three-toed woodpecker
Passeriformes	
<u>Sayornis nigricans</u> *	Black phoebe
<u>Empidonax</u> sp.	Empidonax flycatcher (Dusky, Hammond's, Western)
<u>Contopus virens</u>	Western wood pewee
<u>Nuttallornis borealis</u>	Olive-sided flycatcher
<u>Tachycineta thalassina</u> *	Violet-green swallow
<u>Iridoprocne bicolor</u> *	Tree swallow
<u>Stelgidopteryx ruficollis</u> *	Rough-winged swallow
<u>Petrochelidon pyrrhonota</u> *	Cliff swallow
<u>Perisoreus canadensis</u> 2	Gray jay
<u>Cyanocitta stelleri</u> 2	Steller's jay
<u>Aphelocoma coerulescens</u> 2	Scrub jay
<u>Corvus corax</u>	Common raven
<u>Corvus brachyrhynchos</u> *	Common crow

TABLE II.-continued

Order-Scientific Name	Common Name
Passeriformes	
<u>Nucifraga columbiana</u>	Clark's nutcracker
<u>Parus atricapillus</u> 2	Black-capped chickadee
<u>Parus gambeli</u> 2	Mountain chickadee
<u>Parus rufescens</u>	Chestnut-backed chickadee
<u>Parus inornatus</u>	Plain titmouse
<u>Psaltiriparus minimus</u>	Common bushtit
<u>Sitta carolinensis</u> 2	White-breasted nuthatch
<u>Sitta canadensis</u>	Red-breasted nuthatch
<u>Sitta pygmaea</u>	Pygmy nuthatch
<u>Certhia familiaris</u>	Brown creeper
<u>Chamaea fasciata</u> *	Wrentit
<u>Cinclus mexicanus</u> 2	Dipper
<u>Troglodytes aedon</u> *	House wren
<u>Troglodytes troglodytes</u> 2	Winter wren
<u>Thryomanes bewickii</u> *	Bewick's wren
<u>Catherpes mexicanus</u> *	Canon wren
<u>Turdus migratorius</u> 2	Robin
<u>Ixoreus naevius</u>	Varied thrush
<u>Hylocichla guttata</u> 2	Hermit thrush
<u>Hylocichla ustulata</u>	Swainson's thrush
<u>Sialia mexicana</u> *	Western bluebird
<u>Sialia currucoides</u> *	Mountain bluebird
<u>Myadestes townsendi</u> 2	Townsend's solitaire
<u>Regulus satrapa</u> 2	Golden-crowned kinglet
<u>Regulus calendula</u> 2	Ruby-crowned kinglet
<u>Bombycilla garrula</u> *	Bohemian waxwing
<u>Sturnus vulgaris</u> *	Starling
<u>Vireo huttoni</u> *	Hutton's vireo
<u>Vireo solitarius</u> *	Solitary vireo
<u>Vireo gilvus</u> *	Warbling vireo
<u>Vermivora ruficapilla</u> *	Nashville warbler
<u>Dendroica petechia</u> *	Yellow warbler
<u>Dendroica coronata</u> *	Myrtle warbler
<u>Dendroica auduboni</u>	Audobon's warbler
<u>Dendroica townsendi</u>	Townsend's warbler
<u>Oporornis tolmiei</u> *	MacGillivray's warbler
<u>Icteria virens</u> *	Yellow-breasted chat
<u>Wilsonia pusilla</u> *	Wilson's warbler
<u>Dendroica occidentalis</u>	Hermit warbler

1 The animals presence verified by collection.

2 The animals presence verified by sound or sighting.

* The animals expected presence considered as marginal or uncommon in the primary habitat of the natural area.

TABLE III.-Tentative list of amphibians and reptiles which are expected to reside within the Ashland Research Area

Order-Scientific Name	Common Name
Anura	
<u>Ascaphus truei</u> 1	Tailed frog
<u>Hyla regilla</u> 2	Pacific tree frog
<u>Rana boylei</u>	Yellow-legged frog
<u>Rana aurora</u> *	Red-legged frog
<u>Bufo boreus</u> 1	Western toad
Caudata	
<u>Ambystoma macrodactylum</u>	Long-toed salamander
<u>Aneides flavipunctatus</u> 1	Black salamander
<u>Aneides ferreus</u>	Clouded salamander
<u>Dicamptodon ensatus</u> 1	Pacific giant salamander
<u>Ensatina eschscholtzi</u> 1	Escholtz's salamander
<u>Plethodon elongatus</u>	Del Norte salamander
<u>Taricha granulosa</u> 1	Rough-skinned newt
Squamata	
<u>Eumeces skiltonianus</u>	Western skink
<u>Gerrhonotus coeruleus</u> 1	Northern alligator lizard
<u>Gerrhonotus multicarinatus</u> 2	Foothill alligator lizard
<u>Sceloporus occidentalis</u> 2	Western fence lizard
<u>Coluber constrictor</u>	Racer
<u>Charina bottae</u>	Rubber boa
<u>Diadophis punctatus</u> *	Ringneck snake
<u>Lampropeltis zonata</u>	California mountain kingsnake
<u>Lampropeltis getulus</u> *	Common kingsnake
<u>Thamnophis sirtalis</u> 2	Common garter snake
<u>Thamnophis elegans</u> 1	Western terrestrial garter snake
<u>Thamnophis couchi</u> *	Western aquatic garter snake
<u>Thamnophis ordinoides</u> *	Northwestern garter snake
<u>Contia tenuis</u> *	Sharp-tailed snake
<u>Pituophis melanoleucus</u> *	Gopher snake
<u>Crotalus viridis</u> *	Western rattlesnake

1 The animals presence verified by collection.

2 The animals presence verified by sound or sighting.

* The animals expected presence considered as marginal or uncommon in the primary habitat of the natural area.

SPECIES COMMENTARY

Mammals:

Sorex trigonirostris (Ashland shrew). Extensive efforts were made to sample Insectivores but none of the 35 shrews captured were identified as this species. The species is not included in the tentative list of mammals because the very existence of this species is questionable - the last recorded capture being in 1924. Efforts will be continued to find the species in the Ashland area, hopefully for the shrew, in the Research Natural Area.

Sorex obscurus (Dusky shrew). The extensive sampling for Insectivores yielded this addition to the published list of mammals. Eight specimens were captured, the majority near the upper elevation of Ashland Creek in the Natural Area. One was also captured near the inlet to Reeder Reservoir.

Tadarida brasiliensis (Brazilian free-tailed bat). There does not appear to be suitable feeding areas or roosting sites for this species in the Natural Area. Since sizable populations of this bat occur in Ashland and Medford and they have a fairly wide range of movement, it is feasible that they may briefly visit the Natural Area during a foraging flight.

Microtus californicus (California meadow vole). This is a low elevation grassland vole for which no suitable habitat could be found in the study area. Some very limited grassy areas were found at the higher elevations of the Natural Area and these were trapped heavily with no California meadow voles being captured.

Microtus longicaudus (Long-tailed vole). One specimen was found in Southern Oregon College mammal collection which had been collected

at the upper elevations of the Natural Area. This represents an addition to the published list.

Clethrionomys californicus (California red-backed vole). Several specimens were captured at the upper elevations of the study area. It appears to be a relatively common inhabitant of the Douglas Fir forest in this area. This represents an addition to the published list.

Microtus oregoni (Oregon or Creeping vole), Microtus townsendi (Townsend vole), and Peromyscus truei (Piñon mouse). These species were not found during the study but in my opinion their occurrence in the area is as likely as several others marked as marginal or uncommon, and hence they should probably be included in the revised list of mammals.

Neotoma cinerea (Bushy-tailed woodrat). Several specimens were captured during the study, primarily at the lower elevations of the Natural Area. This represents an addition to the published list.

Thomomys bottae (Botta pocket gopher). Only three gophers were captured although extensive efforts were made to find gopher sign and set traps. The three specimens were captured at different elevations and soil types all appear to be Thomomys mazama (Mazama pocket gopher) which should be added to the published list.

Dipodomys heermanni (Heerman kangaroo rat). Although this species has been trapped on the south facing slopes of Mt. Ashland, not far south of the Natural Area, at about the same elevations as the Natural Area, there does not appear to be suitable habitat in the study area.

Zapus princeps (Western jumping mouse). One specimen was obtained near the east fork of Ashland Creek at the upper elevation boundary of the Natural Area. This represents an addition to the published list.

Bassariscus astutus (Ringtail cat). No animals or their sign were encountered during the study. However, it appears to me that some suitable habitat is present and final status should await further detailed study.

Birds:

Strix occidentalis caurina (Northern spotted owl). As pointed out earlier the status of this animal was not determined. Literature suggests that the Natural Area habitat may be suitable.

Amphibians:

Aneides flavipunctatus (Black salamander). No representatives of this species were collected during the study, but three specimens, tentatively identified by the author as Black salamanders, collected from the study area, were found in the Southern Oregon College Reptile and Amphibian collection. These specimens were taken in May 1971 from the mine shaft along the eastern border of the Natural Area near the west side of section 27. Assuming this tentative identification is correct, it represents a range extension and the Ashland Research Natural Area is the northeast limit of the known range.

Aneides ferreus (Clouded salamander). This species is included in the list because limited habitat suitable for its existence occurs in the Natural Area.

Plethodon stormi (Siskiyou salamander). No representatives of this species were found and no optimal habitat was encountered. However, so little is known about this species, its possible occurrence in the area should not be totally ruled out.

LITERATURE CITED

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